APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,581	06/26/2003	Brian King Flachs	AUS920020595US1	5119

7590 08/07/2006	EXAMINER
Gregory W. Carr	SUGENT, JAMES F
670 Founders Square	

	ART UNIT	PAPER NUMBER
900 Jackson Street	2116	

Dallas, TX 75202

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/606,581	FLACHS ET AL.
	Examiner	Art Unit	
	James F. Sugent	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 June 2006</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) <u>24-39</u> is/are allowed.

6) ☒ Claim(s) <u>20-23</u> is/are rejected.

7) ☒ Claim(s) <u>24, 26-28, 31 and 35-36</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

This Office Action is sent in response to Applicant's Communication received June 2,

2006 for application number 10/606581 originally filed June 26, 2003. The Office hereby

5   acknowledges receipt of the following and placed of record in file: claims 20-39 are submitted

for examination wherein previous claims 1-19 have been cancelled.

Claim Objections

Claims 24, 26-28, 31 and 35-36 objected to because of the following informalities: claim

10   24 (line 2), claim 26 (line 11), claim 27 (line 2), claim 28 (line 2), claim 31 (lines 13 and 17),

claim 35 (line 2) and claim 36 (line 2) all contain the word "even" although it does read

correctly. Examiner asserts the Applicant's intention is to use the word "event." Please change

all claims (listed above) to read "event" instead of "even." Appropriate correction is required.

15   *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
20   in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

25   Claims 20-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Santhanam et

al. (U.S. Patent No. 6,971,038 B2) (hereinafter referred to as Santhanam).

As to claim 20, Santhanam discloses a method for reducing electrical power dissipation

in a computer system, comprising: providing: a counter corresponding to a data channel

(Santhanam discloses a counter 42 used for floating point instructions); a processor (10) coupled

to receive computer program instructions and configured to execute the received computer

5   program instructions (column 1, lines 29-32 and column 2, lines 36-45); determining at least one

component of the processor that is not used when the processor has executed all received

computer program instructions and is waiting for further computer program instructions

(Santhanam discloses a second floating point execution unit having its clock disabled if not

needed; column 5, lines 55-64); decrementing a count stored in the counter (42) when the

10   processor executes an instruction corresponding to the data channel (Santhanam discloses the

floating point counter being decremented each clock pulse when the system is performing a

floating point instruction; column 6, lines 4-21 and column 8, lines 62-64 with block 63); and

transitioning the at least one component of the processor to a low power mode in the event the

count stored in the counter reaches a predetermined value (Santhanam discloses the local clocks

15   38C-38D to FPUs 24A-24B being disabled when FPU counters reach zero; column 6, lines 20-

21 and column 8, line 65 thru column 9, line 1 with block 66).

As to claim 21, Santhanam further discloses the method wherein the transitioning

comprises: transitioning the at least one component of the processor to a low power mode in the

event the count stored in the counter reaches either: (i) a predetermined minimum value

20   corresponding to a predetermined minimum amount of data in the data channel, or (ii) a

predetermined maximum value corresponding to a predetermined maximum amount of data in

the data channel (Santhanam discloses the counter either being incremented or decremented to determine the event for disabling functional unit clocks; column 6, lines 15-26).

As to claim 22, Santhanam discloses a computer system, comprising: a counter corresponding to a data channel (Santhanam discloses a counter 42 used for floating point

5   instructions); a processor (10) coupled to receive computer program instructions and a power control signal, wherein the processor is configured to execute the received computer program instructions (column 1, lines 29-32 and column 2, lines 36-45 and column 3, lines 3-10), and wherein the processor comprises at least one component that is not used when the processor has executed all received computer program instructions and is waiting for further computer program

10   instructions (Santhanam discloses a second floating point execution unit having its clock disabled if not needed; column 5, lines 55-64), and wherein the processor is configured to transition the at least one component to a low power mode in response to the power control signal (Santhanam discloses the local clocks 38C-38D to FPUs 24A-24B being disabled when FPU counters reach zero; column 6, lines 20-21 and column 8, line 65 thru column 9, line 1 with

15   block 66); means for decrementing a count (40) stored in the counter when the processor executes an instruction corresponding to the data channel data (Santhanam discloses the floating point counter being decremented each clock pulse when the system is performing a floating point instruction; column 6, lines 4-21 and column 8, lines 62-64 with block 63); and means for producing the power control signal (14) in the event the count stored in the counter reaches a

20   predetermined value (Santhanam discloses the local clocks 38C-38D to FPUs 24A-24B being disabled when FPU counters reach zero; column 3, lines 2-12 and column 6, lines 20-21 and column 8, line 65 thru column 9, line 1).

As to claim 23, Santhanam discloses the computer system wherein the computer system comprises a channel unit, and wherein the channel unit comprises the counter, and wherein the channel unit is configured to decrement the count stored in the counter when the processor executes an instruction corresponding to the data channel (Santhanam discloses the floating point

5   counter being decremented each clock pulse when the system is performing a floating point instruction; column 6, lines 4-21 and column 8, lines 62-64 with block 63).

Allowable Subject Matter

Claims 24-39 are allowed.

10   Claim 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: during the Examiner's Search, the element found in independent claims 26 and 31:

15   *"...a processor coupled to the channel unit...wherein the processor is*

configured to provide a signal to the channel unit in the event an instruction

corresponding to the data channel is executed; wherein the channel unit is

configured to respond to the signal from the processor by decrementing a count

stored in the counter, ..."

20   could not be found. It is this element within the independent claims 26 and 31 that make them allowable subject manner. Dependent claim 25 comprises the same limitation as noted above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Response to Arguments

5   Applicant's arguments with respect to claims 20-23 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

10   Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

15   the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

20

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James Sugent whose telephone number is (571) 272-5726. The

examiner can normally be reached on 8AM - 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

5   supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

10   applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

15   James Sugent
     Patent Examiner, Art Unit 2116
     July 25, 2006

LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100